

WHAT IS CLAIMED IS:

1. An image processing apparatus that performs image processing for generating image data to be used for  
5 printing by means of printing means, said apparatus comprising;

retaining means for retaining density correction data for each of a plurality of printing conditions between which density appears differently in the printing by means  
10 of the printing means;

judging means for judging the printing condition when performing image processing; and

density correction means for performing density correction on the image data using the density correction data corresponding to the printing condition judged by said  
15 judging means, among the density correction data retained by said retaining means.

2. An image processing apparatus as claimed in claim 1,  
20 wherein the printing conditions are kinds of images to be printed.

3. An image processing apparatus as claimed in claim 1,  
wherein the printing conditions are printing modes which  
25 are discriminated from a driving frequency of the printing means.

4. An image processing apparatus as claimed in claim 1, wherein the printing conditions are scanning directions in which the printing means performs scanning when performing printing.

5

5. An image processing apparatus as claimed in claim 1, wherein the printing conditions are sizes of dot which the printing means can form with different sizes.

10 6. An image processing apparatus as claimed in claim 1, wherein the printing conditions are ink concentrations inks of which the printing means can use as a plurality of inks having a different concentration to perform printing.

15

7. An image processing apparatus as claimed in claim 1, wherein the printing means has a plurality of printing elements and the density correction data retained by said retaining means is retained for each of the plurality of 20 printing elements in said printing means.

8. An image processing apparatus as claimed in claim 1, wherein the printing means has a plurality of printing elements and the density correction data retained by said 25 retaining means is retained for each of rasters of the image data, each of rasters respectively corresponding to a predetermined number of printing elements among the

plurality of printing elements in said printing means.

9. An image processing apparatus as claimed in claim 1, wherein the printing means ejects ink to perform printing.

5

10. An image processing apparatus as claimed in claim 9, wherein the printing means ejects ink using thermal energy.

11. An image processing apparatus as claimed in claim 1,  
10 wherein said judging means judges the printing condition  
by simulating printing by said printing means.

12. An image processing method that performs image  
processing for generating image data to be used for  
15 printing by means of printing means, said method comprising  
the steps of;

preparing density correction data for each of a plurality of printing conditions between which density appears differently in the printing by means of the  
20 printing means;

judging the printing condition when performing image processing; and

25 performing density correction on the image data using the density correction data corresponding to the printing condition judged by said judging step, among the density correction data prepared by said preparing step.

13. An image processing method as claimed in claim 12, wherein the printing conditions are kinds of images to be printed.

5 14. An image processing method as claimed in claim 12, wherein the printing conditions are printing modes which are discriminated from a driving frequency of the printing means.

10 15. An image processing method as claimed in claim 12, wherein the printing conditions are scanning directions in which the printing means performs scanning when performing printing.

15 16. An image processing method as claimed in claim 12, wherein the printing conditions are sizes of dot which the printing means can form with different sizes.

17. An image processing method as claimed in claim 12, 20 wherein the printing conditions are ink concentrations inks of which the printing means can use as a plurality of inks having a different concentration to perform printing.

25 18. An image processing method as claimed in claim 12, wherein the printing means has a plurality of printing elements and the density correction data prepared by said

preparing step is prepared for each of the plurality of printing elements in said printing means.

19. An image processing method as claimed in claim 12,  
5 wherein the printing means has a plurality of printing elements and the density correction data prepared by said preparing step is prepared for each of rasters of the image data, each of rasters respectively corresponding to a predetermined number of printing elements among the  
10 plurality of printing elements in said printing means.

20. An image processing method as claimed in claim 12,  
wherein the printing means ejects ink to perform printing.

15 21. An image processing method as claimed in claim 20,  
wherein the printing means ejects ink using thermal energy.

22. An image processing method as claimed in claim 12,  
wherein said judging step judges the printing condition  
20 by simulating printing by said printing means.